Post-transplant lymphoproliferative disorder of the thyroid gland

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Post-transplant lymphoproliferative disorder (PTLD) encompasses a wide spectrum of diseases that arise as a consequence of chronic immunosuppression after solid organ or hematopoietic stem cell transplantation. It is characterized by uncontrolled proliferation of B or T lymphocytes, in many cases triggered by Epstein-Barr virus (EBV) infection. It most commonly involves lymphatic tissue, but extranodal disease is not uncommon, most often affecting the liver, lungs, or skin. Thyroid involvement represents an exceptionally rare manifestation of PTLD, usually mimicking aggressive primary thyroid carcinoma in clinical presentation and imaging findings. We present the case of an 82-year-old male patient who underwent liver transplantation in 2004. He was admitted with dyspnea and a progressively enlarging right-sided neck mass. Clinical examination revealed an enlarged thyroid and cervical lymph nodes, while fiberoptic laryngoscopy showed a bulge of the posterior tracheal wall without airway compromise. Radiological work-up demonstrated diffuse thyroid enlargement with infiltration of surrounding structures (cricoid cartilage, trachea), encasement of the brachiocephalic trunk, necrotic lymph nodes bilaterally in the neck and mediastinum, and multiple secondary lesions in the lung parenchyma. Based on the working diagnosis of thyroid neoplasm, primarily anaplastic carcinoma, further evaluation was conducted. Given the profound chronic immunosuppression, a lymphoproliferative disorder was also considered. Hematologic testing revealed elevated EBV DNA copies in the blood. Fine needle aspiration of the thyroid and cervical lymph nodes suggested diffuse large B-cell lymphoma, and histopathological analysis of an excised cervical lymph node confirmed PTLD. This case highlights the importance of considering PTLD in the differential diagnosis of neck and thyroid tumors in transplant recipients. We also emphasize the importance of regular long-term surveillance of immunosuppressed patients to enable a timely detection of de novo malignant diseases.

Key words: anaplastic carcinoma, lymphoma, thyroid gland, transplant